OXFORD

INTERNATIONAL
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Please write clearly in block capitals.

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I declare this is my own work.

INTERNATIONAL A-LEVEL
PSYCHOLOGY

Unit 3 Advanced Topics and Research Methods 2

Monday 9 January 2023 07:00 GMT Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:
- a calculator, which you are expected to use where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- All working must be shown.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 90.

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Section A: Psychology of Sleep

Answer **all** questions in the spaces provided.

0 1 One type of biological rhythm is a circadian rhythm. An example of a circadian rhythm is the sleep/wake cycle.

Identify **two other** types of biological rhythms and give an example of **each** type.

[4 marks]

Ying is taking part in an experiment into the nature of sleep. Electrodes are connected to his head to record the electrical activity of his brain when he is asleep. The electrical activity of Ying's brain speeds up and becomes irregular 80 minutes after he has fallen asleep.

0 2 . 1 Identify the type of sleep Ying enters 80 minutes after he falls asleep. With reference to the experiment above, explain how you know Ying has entered this type of sleep.

[2 marks]

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0 2 . 2 Identify **three other** characteristics of the type of sleep you identified in your answer to Question **02.1**.

[3 marks]

0 3 Describe and evaluate research into memory consolidation as a function of sleep.

[9 marks]

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Extra space

Do not write outside the box

0 4 Discuss the effects of shift work on biological rhythms.

[12 marks]

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Extra space

30

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Section B: Schizophrenia

Answer **all** questions in the spaces provided.

Erika hears voices in her head. She believes the voices are the thoughts of other people. When in conversation with other people, Erika rarely responds. She wants to go to college to study but often sits at home doing nothing all day.

0 5 Identify an example of each of the following symptoms of schizophrenia shown by Erika.

[4 marks]

Avolition _____

Delusion _____

Hallucination _____

Speech poverty _____

0 6 Explain **one** strength and **one** limitation of cognitive therapy as a therapy for schizophrenia.

[3 marks + 3 marks]

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0 7 Describe and evaluate **two** biological explanations for schizophrenia.

[20 marks]

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Do not write outside the box

Extra space

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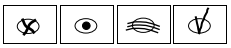
Section C: Research Methods 2

Answer **all** questions in the spaces provided.

Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD 

WRONG METHODS 

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

Previous research has found that students who study languages are better at solving verbal problems than numerical problems. A researcher decided to investigate this further and conducted an experiment using a sample of 10 language students. The language students were asked to solve two different types of problem in controlled conditions.

In condition 1, 10 language students were invited to a university and were asked to solve five verbal problems correctly. The researcher recorded the time taken to solve the problems correctly.

In condition 2, the same 10 participants were invited back to the university a week later. This time they were asked to solve five numerical problems correctly. Again, the researcher recorded the time taken to solve the problems correctly.

0 8 Briefly outline what is meant by an aim.

[1 mark]

0 9 Identify the aim of this study.

[1 mark]

Do not write outside the box

1 0 Briefly outline what is meant by a hypothesis.

[1 mark]

1 1 Write an appropriate hypothesis for this study.

[3 marks]

1 2 Identify the type of experimental method used in this study. Explain your answer.

[2 marks]

Turn over for the next question

Do not write outside the box

1 3 Explain **one** strength of the type of experimental method you identified in your answer to Question **12**.

[3 marks]

The results for the 10 participants are shown in **Table 1** below.

Table 1 – Time taken to solve verbal and numerical problems

Participant	Condition 1 – Time taken to solve 5 verbal problems (seconds)	Condition 2 – Time taken to solve 5 numerical problems (seconds)
1	134	167
2	123	235
3	68	109
4	134	178
5	230	209
6	102	198
7	269	358
8	134	103
9	74	289
10	102	234

1 4 Use the data in **Table 1** to calculate the mean time taken to solve the problems for **each** condition. Show your workings.

[4 marks]

Do not write outside the box

1 5 Which of the following ways of presenting data would be the most appropriate way of displaying the means for each condition? Shade **one** box.

[1 mark]

A Bar chart ⬭

B Histogram ⬭

C Line graph ⬭

D Scattergram ⬭

1 6 Identify an appropriate statistical test which could be used to analyse the results of this study. Give **three** reasons why the test you have chosen would be suitable in this case.

[4 marks]

Turn over for the next question

Do not write outside the box

The researcher identified a possible problem with demand characteristics in the study.

1 7 Briefly outline what is meant by demand characteristics.

[1 mark]

1 8 Explain how demand characteristics could have affected the validity of this study.

[3 marks]

1 9 Briefly explain **one** way that the researcher could have reduced the chances of demand characteristics in this study.

[2 marks]

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In a follow-up study, the researcher asked the original participants to keep a daily problem-solving diary for one week. In the diary, they were asked to record details of any problems they had solved during their studies.

2 0 Explain how the researcher could use content analysis to analyse the problem-solving diaries.

[4 marks]

30

END OF QUESTIONS

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ANSWER IN THE SPACES PROVIDED

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Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

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Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

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